

FIG. 1

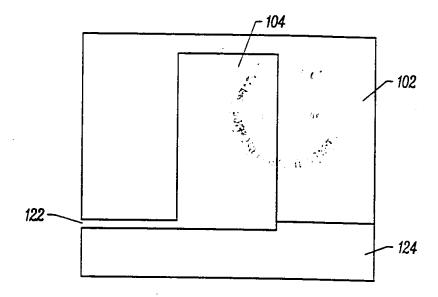


FIG. 2A

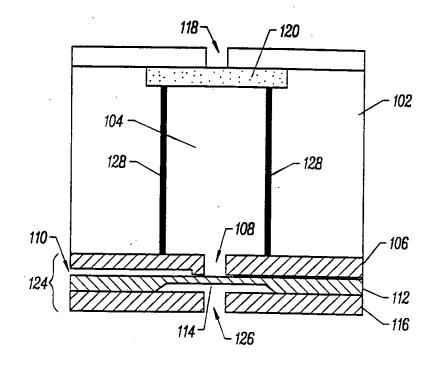


FIG. 2B

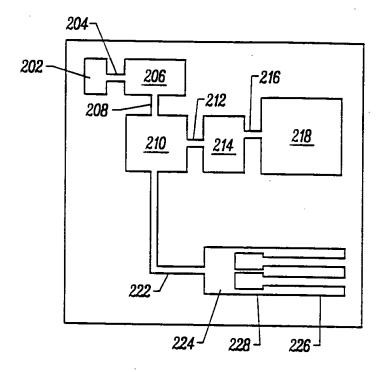
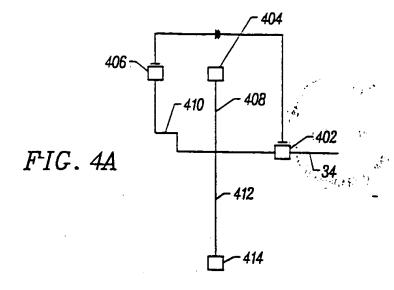
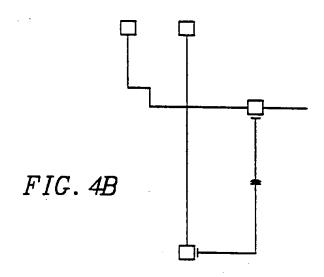
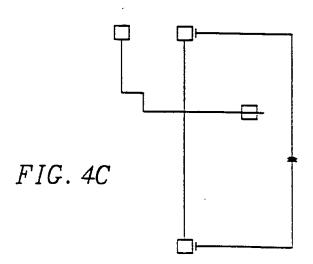


FIG. 3







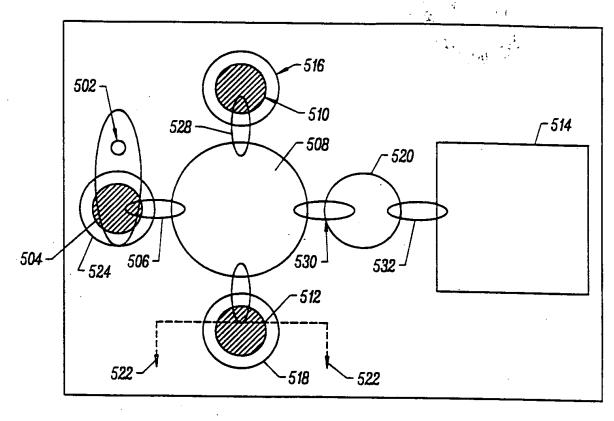


FIG. 5A

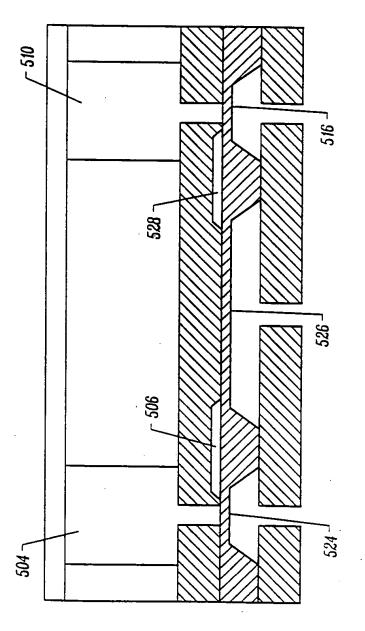
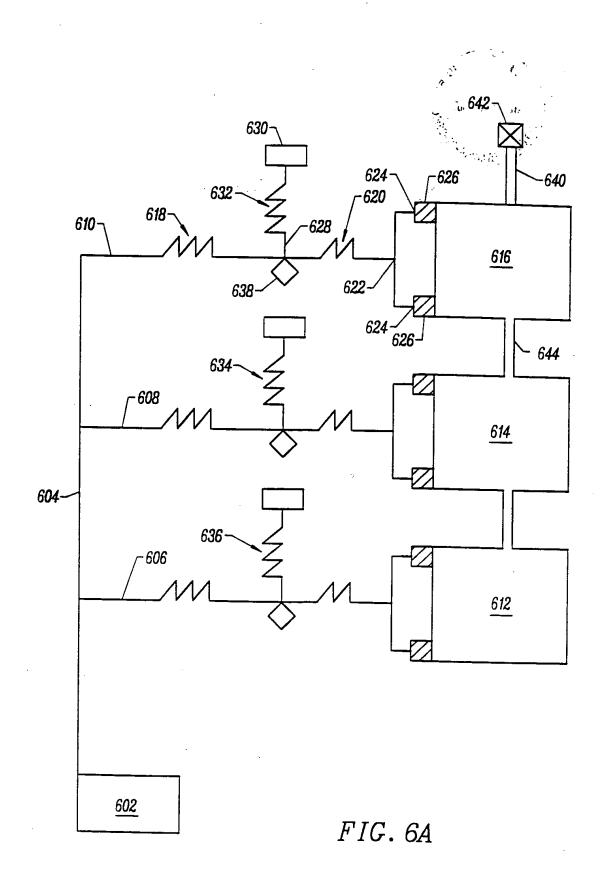
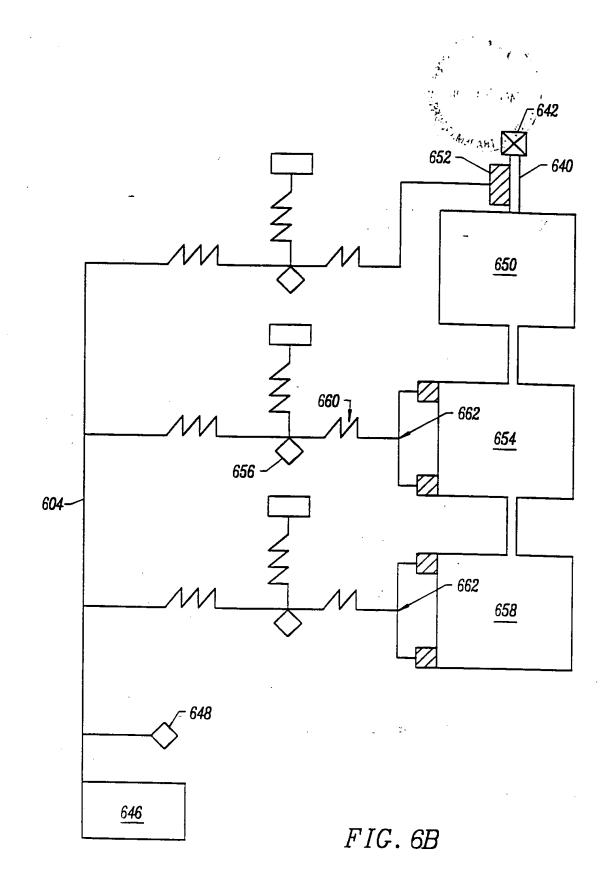


FIG. 5B







### Pressure Distribution Among Control Nodes

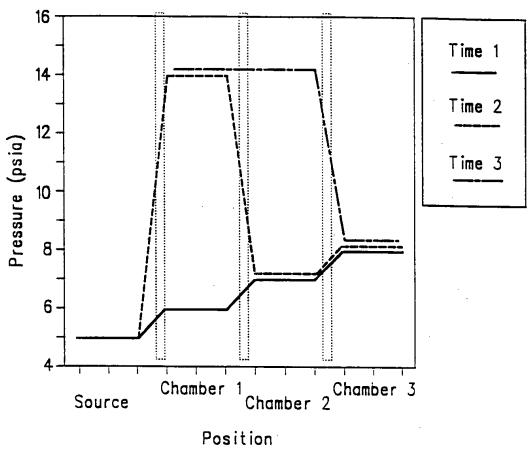


FIG. 6C

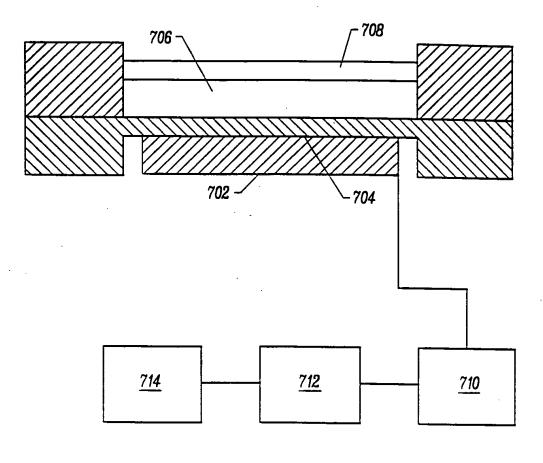


FIG. 7A

## Flow Visualization



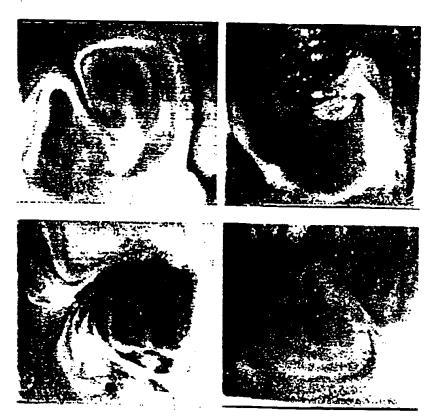
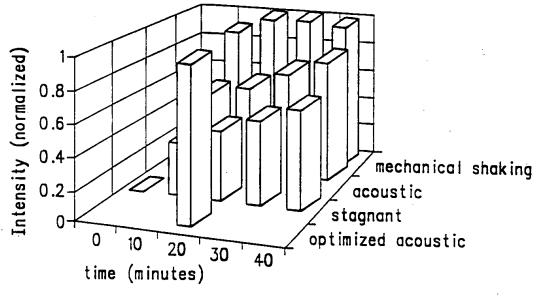
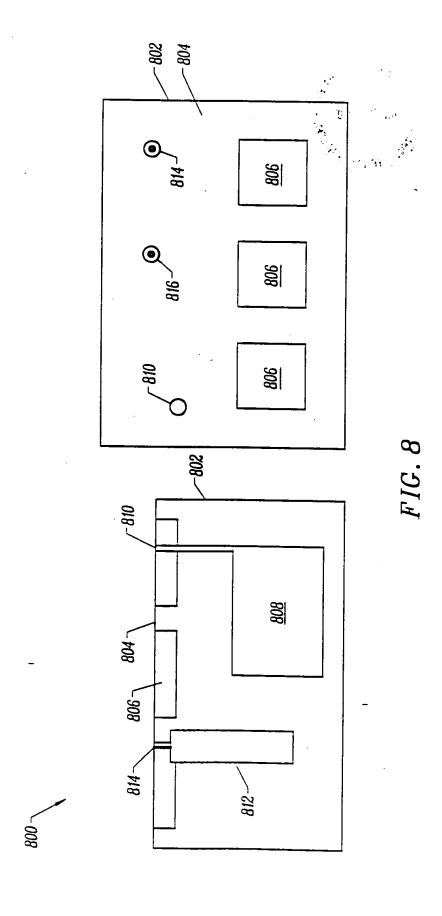


FIG. 7B



Checkerboard Oligo Test Pattern

FIG. 7C



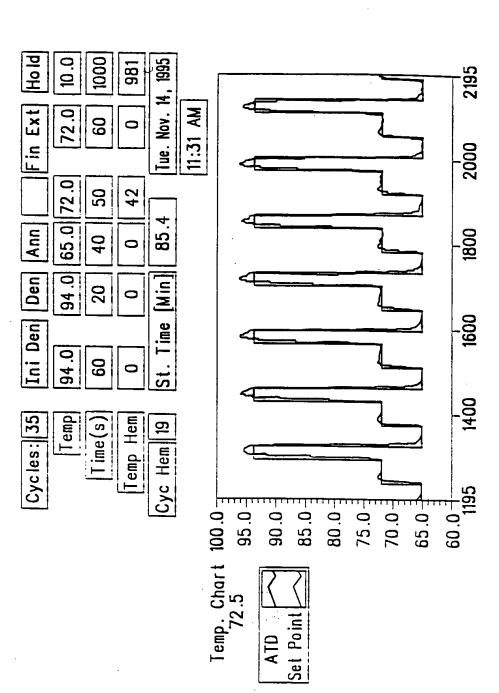
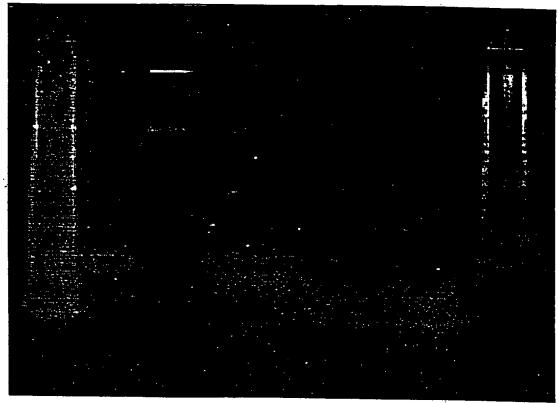


FIG. 9

# Effect of Fragmentation Time at 94C





Correct Call Rates:

74% 95.8% 95.9% 95.5% 83%

FIG. 10A



Standard

Tube Based





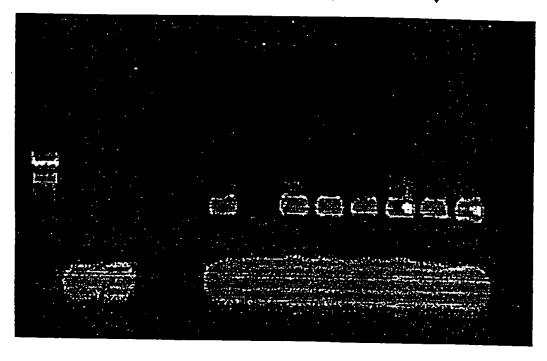


FIG. 10B

# **PCR** Results

# ■ PCR:

amplification: 109 (35 cycles)

control microchamber

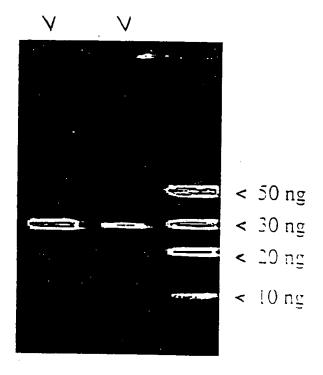


FIG. 10C

Figure 11

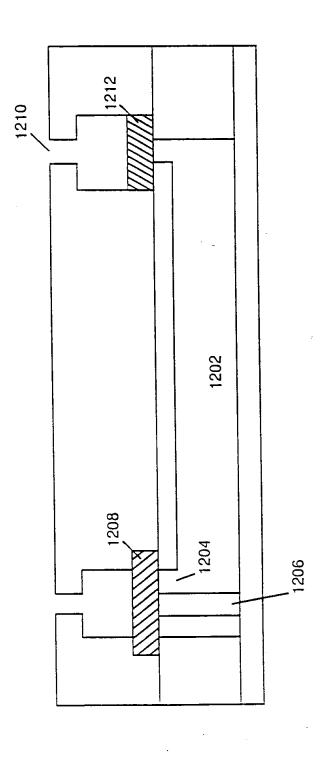


Figure 12a

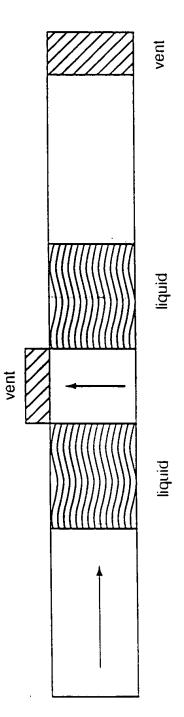


Figure 12b

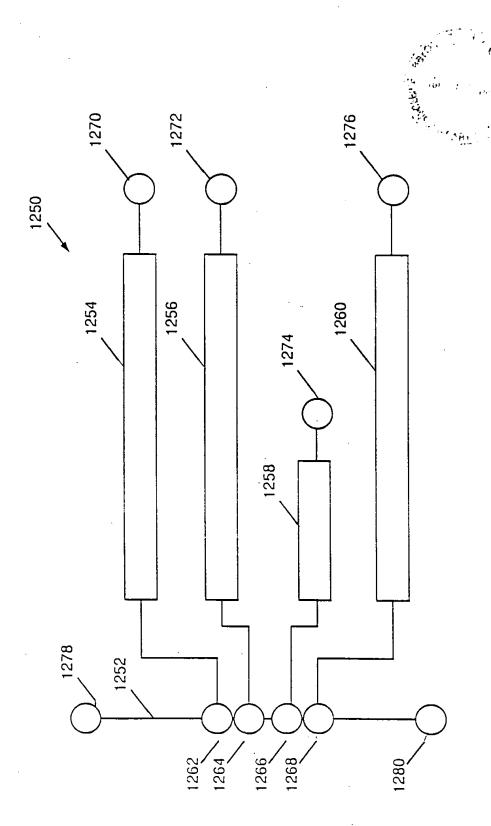


Figure 12c

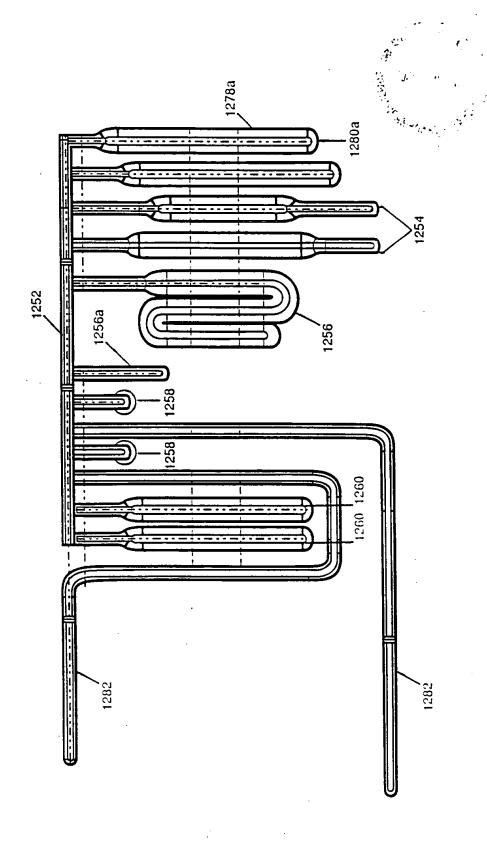


Figure 12d

Figure 13

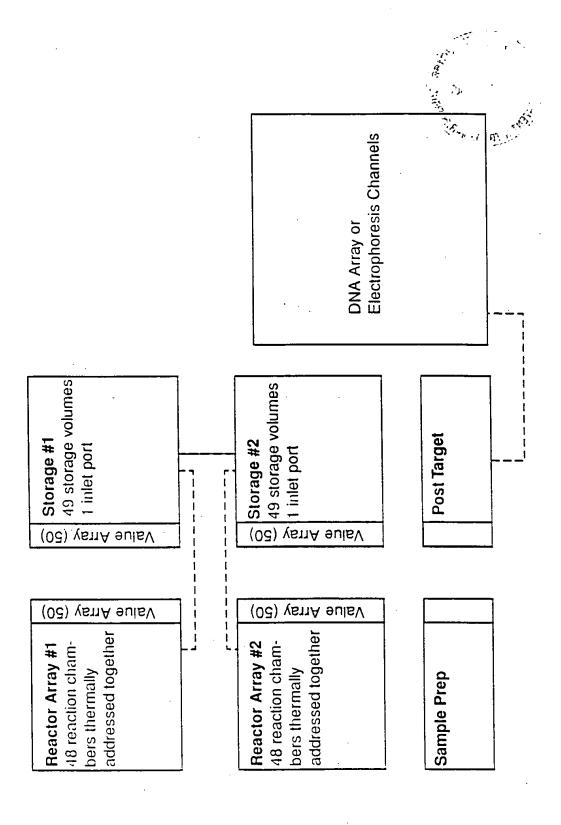


Figure 14

# Thermal Configuration

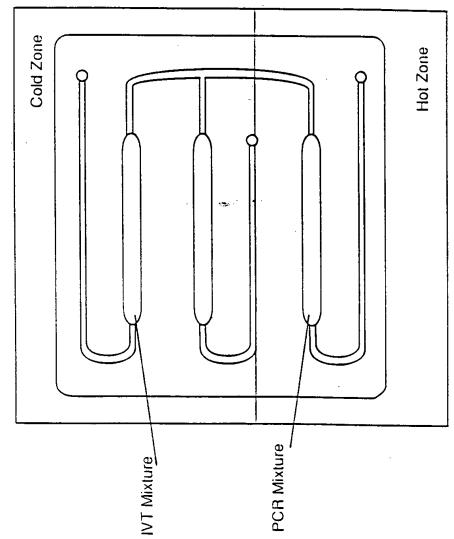


Figure 15a

PCR =>



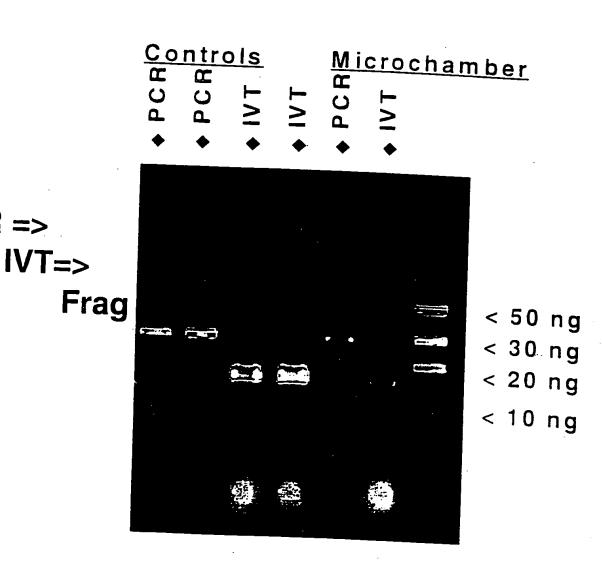


Fig. 15B